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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,623	11/21/2005	Miyuki Shibano	KNI-203-A	7040

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EXAMINER

EL ARINI, ZEINAB

ART UNIT PAPER NUMBER

1746

DATE MAILED: 09/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/530,623

Applicant(s)

SHIBANO ET AL.

Examiner

Zeinab E. EL-Arini

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 7/04/05
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- ☐ Notice of Informal Patent Application
- ☐ Other: ____

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: On page 7, line 11, "that pat", and at line 26, "the cleaning liquid the washing tank" are confusing terms.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite and incomplete, because an ultrasonic component has not been recited. At line 8, "the position", and at line 11, "the vicinities" are without antecedent basis. At line 9, "capable of" is indefinite term.

In claim 2, line 2, "the same shape" lacks antecedent basis.

In claim 3, line 4, "the level", and "the cleaning liquid" and at line 4, "the height" are all without antecedent basis.

In claim 6, line 7, "capable of" is indefinite term. At line 6, "the position", at line 9, "the vicinities", and at line 14, "the time" all are without proper antecedent basis.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogata et al. (5,333,628).

Ogata et al. teach an ultrasonic cleaning apparatus and method. The apparatus comprising a washing tank, a shifting mechanism, a storage tank, an ultrasonic generating means, deaerated liquid, and cleaning agent circulation means. See col. 2, line 35-col. 4, line 4. The reference discloses the inlet and outlet, a lid, and controlling the amount of the cleaning agent. See col. 5, lines 6-50, and col. 6, lines 1-12, 49-54.

Ogata et al. disclose all limitation with the exception of the controlling as claimed.

It would have been obvious for one skilled in the art to use the ultrasonic apparatus taught by Ogata et al. to obtain the claimed invention. This is because the controller as taught by Ogata et al. is able to perform the controlling and the cleaning steps as claimed.

6. Claims 1, 3, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2001-34082(JP'820) or JP 2001-170583 (JP'583) in combination with JP 10-335294 (JP'294).

JP'820 and JP'583 disclose an ultrasonic washing apparatus comprising a washing tank, inlet and outlet, ultrasonic generating means, and storage tank. See the English abstract.

JP'820 or JP'583 do not teach the controlling and the deaerated liquid as claimed.

JP'294 discloses a device and method for cleaning a substrate. The reference discloses the washing tank, the ultrasonic, and the deaerated liquid as claimed.

It would have been obvious for one skilled in the art to use the deaerated liquid taught by JP'294 in the JP'820 or JP'583 to obtain the claimed invention. This is because all reference are from the same technical endeavor which is an ultrasonic cleaning system. One skilled in the art would use controller in the JP'820 or JP'583 to improve the cleaning.

7. Claims 2, 4-5, and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogata et al. or JP'820 or JP'583.

Ogata et al. and JP'820 and JP'583 do not teach a plurality of auxiliary tanks and the packing material as claimed.

It would have been obvious for one skilled in the art to duplicate the number of the wash tank to obtain the claimed invention, because it is a matter of design choice. See In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960) (Claims at issue were directed to a water-tight masonry structure wherein a water seal of flexible material fills the joints which form between adjacent pours of concrete. The claimed water seal has a "web" which lies ** in the joint, and a plurality of "ribs" ** >projecting outwardly from

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each side of the web into one of the adjacent concrete slabs. <The prior art disclosed a flexible water stop for preventing passage of water between masses of concrete in the shape of a plus sign (+). Although the reference did not disclose a plurality of ribs, the court held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced.). Using expandable packing material associated with the inlet and outlet is well known in the art.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dohku et al. (5,501,240) disclose cleaning method and cleaning apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zeinab E. EL-Arini whose telephone number is (571) 272-1301. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Zeinab E. EL-Arini

Zeinab E. EL-Arini
Primary Examiner
Art Unit 1746

ZEE
9/4/06